

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

SKYLINE SOFTWARE SYSTEMS, INC.,

Plaintiff,

v.

KEYHOLE, INC., and
GOOGLE INC.

Defendants.

CIVIL ACTION NOS. 04-11129 DPW &
06-10980 DPW

**SUPPLEMENTAL DECLARATION OF PROFESSOR STEVEN K. FEINER, PH.D. IN
SUPPORT OF DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF**

Nelson G. Apjohn (BBO No. 020373)
NUTTER McCLENNEN & FISH LLP
World Trade Center West
155 Seaport Boulevard
Boston, MA 02210
(617) 439-2000
Fax: (617) 310-9000

Attorneys for Defendants and
Counterclaimants
KEYHOLE, INC. and GOOGLE INC.

Of Counsel
Darryl M. Woo, admitted *pro hac vice*
Michael J. Sacksteder, admitted *pro hac vice*
Carolyn Chang, admitted *pro hac vice*
Saundra L. M. Riley, admitted *pro hac vice*
FENWICK & WEST LLP
Embarcadero Center West
275 Battery Street
San Francisco, CA 94111
Tel. (415) 875-2300
Fax (415) 281-1350

I, Steven K. Feiner, declare as follows:

1. I know the following information through my own personal knowledge, unless otherwise stated, and if called and sworn as a witness, I could and would competently testify thereto.

2. I have reviewed Plaintiff Skyline Software Systems, Inc.'s Opening Claim Construction Brief filed on September 29, 2006 ("Skyline's Opening Brief"), as well as the accompanying Declaration of Dinesh Manocha, Ph.D., in Support of Plaintiff's Opening Claim Construction Brief ("Manocha Declaration"). I submit this supplemental declaration in support of the Responsive Claim Construction Brief filed by Keyhole, Inc. and Google Inc. (collectively "Google" or "Defendants") regarding claims other than claims 1 and 12 of U.S. Patent No. 6,496,189 ("the '189 patent") and in response to arguments made in Skyline's Opening Brief and the Manocha Declaration.

3. I have previously submitted declarations in this case in support of Google's responsive claim construction brief and in support of Google's opposition to Skyline's motion for preliminary injunction. I also submitted a declaration in support of Google's Opening Claim Construction Brief, filed on September 29, 2006. I hereby incorporate the opinions stated in those declarations by reference.

"from a succession of resolution levels"

4. I understand that Skyline now suggests that "succession of resolution levels" as used in claim 2 of the '189 patent simply refers to the resolution levels of the data that is stored in a hierarchical structure. In support of this argument, Skyline cites portions of the specification that describe the preparation and hierarchical nature of the database storing the data blocks on a remote server. *See* Skyline's Opening Brief at 11-12 and Manocha Declaration ¶ 12, *citing* '189 patent at cols.8:6-9 and 9:1-21. However, there is no suggestion that the "succession of resolution levels" language corresponds to these disclosures, nor is that how one of skill in the art would understand "succession of resolution levels" in the context of this claim.

5. Claim 2 depends from and contains all the limitations of claim 1. '189 patent,

claim 2 at 16:45 (claiming “[a] method according to claim 1”). Claim 1 explicitly requires downloading data blocks that belong to a “hierarchical structure.” ’189 patent at col. 16:29-30 and 16:39-40. Thus, even without the “succession of resolution levels” language, claim 2 of the ’189 patent already includes the requirement that the data blocks downloaded from a remote server belong to a hierarchical structure. If the “succession of resolution levels” phrase were to mean the resolution levels of the hierarchical database, as Skyline suggests, it would be largely redundant of limitations that already exist in the claim.

6. I also understand that Skyline and its retained expert claim that one of ordinary skill in the art would understand that none of the communications protocols used by the invention claimed in the ’189 patent can guarantee that data blocks be returned to a user’s computer in a particular order, and therefore “succession of resolution levels” cannot require an ordering. Skyline’s Opening Brief at 13-14; Manocha Declaration ¶¶ 13-16. I disagree. To the contrary, the ’189 patent specifically contemplates and, at times, requires that data blocks be downloaded in a particular order. ’189 patent at cols. 3:37-39 and 4:41-43, and claims 3, 11, 14, 16, and 21. It is contrary to the patent disclosures to suggest, as does Skyline, that claim language in the ’189 patent cannot require a download order. In fact, Skyline admits that “Claim 3 expressly specifies an order in which data blocks are to be requested and received.” Skyline’s Opening Brief at 14.

7. I understand that Skyline and its retained expert further argue that a client-server system that operates over the Internet cannot guarantee that data blocks be received in the order they were requested. First of all, the ’189 patent is not restricted to systems that use the Internet. Second, the ’189 patent claims methods and apparatuses that can and do guarantee that data blocks are received, as well as requested, in a particular order, whether or not they use the Internet. Even Skyline’s retained expert qualifies his opinion, stating that data blocks may be received out-of-order, “unless the description expressly conveys otherwise.” Manocha Declaration ¶ 16. The ’189 patent specification does expressly convey otherwise, explaining that, “[c]ache manager 74 preferably always requests that server 26 send a block 42 *after* the

cache manager *has received* its parent block.” ’189 patent at col. 12:5-7 (emphasis added).

Thus, extending Skyline’s postal service analogy, there are certainly ways in which a letter sent first will always arrive first. For example, a letter sent first will always arrive first if the second letter is not dropped in the mail until after the first letter has already been received by the addressee. As implicitly admitted by Skyline’s retained expert’s qualification of his opinion, nothing in the patent specification precludes operation of the claimed invention in such a manner.

“when not downloading blocks required by the renderer”


8. Figure 8 of the ’189 patent supports a construction of “when not downloading blocks required by the renderer” as “during periods of time when the local computer is not downloading data blocks describing three-dimensional terrain in response to the coordinates received from the renderer.” Figure 8 is a flow chart describing actions taken by the local computer in accordance with a preferred embodiment of the invention. ’189 patent, Figure 8 and col. 14:21-24. The download of excess data blocks “when not downloading blocks required by the renderer” is described in the specification: “if the queue is empty, cache manager **74** fills cache memory **32** with blocks within the range of the current viewpoint.” ’189 patent at col. 15:63-65. The flow chart of Figure 8 similarly depicts the download of excess data blocks when the queue is empty. ’189 patent at Figure 8. As shown in Figure 8, that particular type of download does not flow from the same path as the other download actions, which are all done in response to receiving coordinates and a resolution level from the renderer. *Id.*

9. Thus, the patent specification, through Figure 8, shows that the download of data blocks to fill local memory “when not downloading blocks required by the renderer” is a download action taken when not downloading blocks in response to coordinates received from the renderer. Furthermore, the specification specifically states that, “when connections **76** are not in use bringing *blocks 42 required by renderer 72*, cache manager **74** downloads blocks in the area of the viewpoint to fill cache memory **32**.” ’189 patent at col. 12:13-16 (emphasis added). By contrast, there is no specific disclosure in the specification of an embodiment that

operates according to Skyline's proposed construction of this term as "when not downloading data for displaying the scene corresponding to the current view."

I declare under the penalty of perjury under the laws of the United States of America that, to the best of my knowledge, the foregoing is true and correct.

Dated: October 9, 2006

By: _____
Steven K. Feiner, Ph.D.

Certificate of Service

I hereby certify that, on October 11, 2006, I caused a true and accurate copy of the foregoing document to be served upon all counsel of record for each party by complying with this Court's Administrative Procedures for Electronic Case Filing.

By: /s/ Carolyn Chang
Carolyn Chang